

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A manufacturing method of an endless metal belt having metal rings built up and differing in circumference, comprising the steps of:

a first circumference correction step of expanding each of the metal rings; ~~and~~
a solution heat treatment step; and

a second circumference correction step of expanding each of the metal rings after conducting a solution heat treatment to the expanded metal ring, wherein

by executing the first circumference correction step and the second circumference correction step before and after the solution heat treatment, respectively, an expansion quantity for setting a circumference of each of the metal rings to become a predetermined length is attained.

2. (Currently amended) The manufacturing method of an endless metal belt according to claim 1, wherein an ~~the~~ expansion quantity attained in the first circumference correction step is corrected to correspond to a ~~the~~ circumference set to each of the metal rings differing in circumference.

3. (Original) The manufacturing method of an endless metal belt according to claim 1, wherein the manufacturing method further comprises a rolling step of forming each of the metal rings input in the first circumference correction step by rolling.

4. (Currently amended) The manufacturing method of an endless metal belt according to claim 1, wherein:

each of the metal rings is input between a work roller and a tension roller in the rolling step;

a tension is applied to each of the metal rings by moving the tension roller in the rolling step;

each of the metal rings is rolled by moving a rolling roller to press the rolling roller against the metal ring in the rolling step;

the tension roller and the rolling roller are servo-controlled;

based on one of operation patterns of the tension roller and the rolling roller, the other operation pattern is changed.

5. (Currently amended) The manufacturing method of an endless metal belt according to claim 1, wherein a ~~the~~ work roller and a ~~the~~ rolling roller are set to have an equal circumferential speed.

6. (Currently amended) The manufacturing method of an endless metal belt according to claim 1, wherein:

each of the metal rings is input between a ~~the~~ work roller and a ~~the~~ tension roller in the first and the second circumference correction steps; and

each of the metal rings is expanded by moving the tension roller until the circumference of each of the metal rings becomes a set circumference of each of the metal rings becomes a set circumference in the first and the second circumference correction steps.

7. (Original) The manufacturing method of an endless metal belt according to claim 1, further comprising the step of:

measuring the circumference of each of the metal rings before the second circumference correction step.

8. (Currently amended) The manufacturing method of an endless metal belt according to claim 7, wherein:

based on a moving length of a ~~the~~ tension roller necessary to apply a predetermined tension to each of the metal rings input between a ~~the~~ work roller and the tension roller, the circumference of each of the metal rings is measured, in the circumference measurement step; and

movement of the tension roller is controlled based on a combination of pressure control and position control.

9. (Currently amended) A manufacturing apparatus of an endless metal belt having metal rings built up and differing in circumference, comprising:

a machine to perform a first circumference correction on the metal belt and a second circumference correction on the metal belt, wherein the first circumference correction and the second circumference correction expand the metal rings; and

a heat treatment device to perform a solution heat treatment on the metal rings;
wherein the machine to perform the first circumference correction and the second circumference correction is adapted to perform the second circumference correction after a solution heat treatment has been performed by the heat treatment device

~~a first circumference correction section expanding each of the metal rings; and~~
~~a second circumference correction section expanding each of the metal rings after conducting a solution heat treatment to the expanded metal ring, wherein~~

~~by using the first circumference correction section and the second circumference correction section before and after the solution heat treatment, respectively, an expansion quantity for setting a circumference of each of the metal rings to become a predetermined length is attained.~~

10. (Currently amended) The manufacturing apparatus of an endless metal belt according to claim 9,

wherein by using the machine to perform the first circumference correction and the second circumference correction before and after the solution heat treatment, respectively, an expansion quantity for setting a circumference of each of the metal rings to become a predetermined length is attained;

wherein the expansion quantity attained by the first circumference correction section is corrected to correspond to the circumference set to each of the metal rings differing in circumferences.

11. (Currently amended) The manufacturing apparatus of an endless metal belt according to claim 9, further comprising:

a rolling section forming each of the metal rings input to the machine first
~~circumference correction section by rolling.~~

12. (Currently amended) The manufacturing apparatus of an endless metal belt according to claim 9, wherein:

a ~~the~~ rolling section applies a tension to each of the metal rings input between a work roller and a tension roller by moving the tension roller, and rolls each of the metal rings by moving a ~~the~~ rolling roller to press the rolling roller against the metal ring;

the tension roller and the rolling roller are servo-controlled; and

based on one of operation patterns of the tension roller and the rolling roller, the other operation pattern is changed.

13. (Currently amended) The manufacturing apparatus of an endless metal belt according to claim 9, wherein a ~~the~~ work roller and a ~~the~~ rolling roller are set to have an equal circumferential speed.

14. (Currently amended) The manufacturing apparatus of an endless metal belt according to claim 9, wherein:

during the first circumference correction and the second circumference correction the machine expands ~~first circumference correction section and the second circumference correction section expand~~ each of the metal rings input between a ~~the~~ work roller and a ~~the~~ tension roller by moving the tension roller until the circumference of each of the metal rings becomes a set circumference; and

the tension roller is servo-controlled.

15. (Original) The manufacturing apparatus of an endless metal belt according to claim 9, further comprising:

a circumference measurement section measuring the circumference of each of the metal rings.

16. (Currently amended) The manufacturing apparatus of an endless metal belt according to claim 15 ~~[[9]]~~, wherein:

the circumference measurement section measures the circumference of each of the metal rings input between a ~~the~~ work roller and a ~~the~~ tension roller based on a moving length of the tension roller necessary to apply a predetermined tension to each of the metal rings; and

movement of the tension roller is controlled based on a combination of pressure control and position control.

17. (Currently amended) A manufacturing apparatus of an endless metal belt having metal rings built up and differing in circumference, comprising:

a means for performing a first circumference correction on the metal belt and a second circumference correction on the metal belt, wherein the first circumference correction and the second circumference correction expand the metal rings; and

a means for performing a solution heat treatment on the metal rings;

wherein the means for performing the first circumference correction and the second circumference correction is adapted to perform the second circumference correction after a solution heat treatment has been performed so that an expansion quantity for setting a circumference of each of the metal rings to become a predetermined length is attained

~~first circumference correction means for expanding each of the metal rings; and
second circumference correction means for expanding each of the metal rings after
conducting a solution heat treatment to the expanded metal ring, wherein~~

~~by using the first circumference correction means and the second circumference
correction means before and after the solution heat treatment, respectively, an expansion
quantity for setting a circumference of each of the metal rings to become a predetermined
length is attained.~~

18. (New) The manufacturing apparatus of an endless metal belt according to claim 17, wherein by using the means for performing a first circumference correction on the metal belt and a second circumference correction before and after the solution heat treatment, to perform a first circumference correction before the solution heat treatment and a second circumference correction after the solution heat treatment, an expansion quantity for setting a circumference of each of the metal rings to become a predetermined length is attained.